

---

# ***Adult Environmental Emergencies: Near Drowning/Cardiopulmonary Arrest***

---

## ***I. All Provider Levels***

1. If possible and if safe to do so, remove patient from the water.



**Note Well:** *Enter water only if trained and only as a last resort. Attempt to reach, throw or go with assistance first.*

2. Refer to the Trauma Assessment Protocols.



**Note Well:** *In incidents involving diving injuries, suspect C-spine compromise and treat accordingly.*

3. If spontaneous respirations are present, administer high-flow oxygen as appropriate.
4. If spontaneous respirations or circulation are absent, initiate CPR with BVM and 100% oxygen.

- A. Attach AED and analyze rhythm.



**Note Well:** *Patient should be removed from the water and dried off before utilizing the AED/Manual Defibrillator. Make sure water does not complete circuit between patient and providers.*



**Note Well:** *EMT-I and EMT-P should use monitor-defibrillator.*

- B. Defibrillate patient with AED.



**Note Well:** *EMT-I and EMT-P should use manual defibrillator.*

---

# **Adult Environmental Emergencies: Near Drowning/Cardiopulmonary Arrest**

---

## **I. All Provider Levels (continued)**

- C. Initiate advanced airway management with Combi-tube if respiratory effort is inadequate.



**Note Well:** EMT-I and EMT-P should use ET intubation.

5. Establish large bore IV access with normal saline.



## **II. Advanced Life Support Providers**

1. Administer 1.0 mg Epinephrine 1:10,000 IVP every 3 - 5 minutes for the duration of the arrest.



**Note Well:** EMT-I and EMT-P should administer 2.0 mg Epinephrine 1:1,000 in 8 cc of normal saline via ET if IV access is unobtainable.



**Note Well:** Epinephrine is not to be administered via the Combi-tube.



2. If patient remains in cardiopulmonary arrest following 2 doses of epinephrine consider administering Sodium Bicarbonate 1.0 mEq/kg IVP (*Medical Control Option Only*)



**Note Well:** Drowning - cardiac arrest patients can be considerably acidotic

3. Continuous cardiac monitoring

- A. Referring to the appropriate dysrhythmia algorithm as needed.

---

## ***Adult Environmental Emergencies: Near Drowning/Cardiopulmonary Arrest***

---



### ***III. Transport Decision***

1. Transport to closest open trauma center.



### ***IV. The Following Options are Available by Medical Control Only***

1. Sodium Bicarbonate, 1.0 mEq/kg IVP

---

***Adult Environmental Emergencies:  
Near Drowning/Cardiopulmonary Arrest***

---

---

***This Page Intentionally Left Blank***

---